# Section 1: Introduction

# Executive Summary

In 2000, the federal government enacted the Disaster Mitigation Act (DMA 2000; P.L. 106-390) requiring states, local jurisdictions and tribal governments to have an approved mitigation plan in place to be eligible for mitigation funding. In 2004, King County and its Office of Emergency Management committed to providing coordination in an effort to identify possible alternatives and to secure funding for the benefit of the region.

The King County Regional Hazard Mitigation Plan (RHMP) is a living document and is now undergoing its first five-year major update in 2009. Most pertinent elements of the 2004 RHMP have retained their integrity in the 2009 RHMP. Some sections of this document have been significantly enhanced or are brand new in 2009 and will be indicated as such. General updates and updates to documented FEMA declarations and other significant hazard incidents have been updated and included from years 2004 – September 2009. Section 5, Hazard Identification, has added a new profile in 2009 titled Dam / Dam Safety and the Flooding hazard profile has been significantly updated, among other profiles as indicated in the 2009 RHMP. All footnotes / endnotes and links have been reviewed, verified, and updated as needed or possible. This entire document has been reviewed, and significantly improved, with many new sections.

In an effort to provide ease of understanding the RHMP update, the following information should be considered. **Matrix 1.1**, titled **King County Regional Hazard Mitigation Plan 2009, Matrix of Changes**, has been created. This document details all major changes made to the updated RHMP. The Matrix is located at the end of this section. Additional changes are indicated within each RHMP section, and are referenced accordingly. During development of this updated document, some duplicated language has been removed, but reference has been made to the existing language in other portions of the 2009 RHMP.

This document is the culmination of a cooperative Regional Planning Team effort and required participation from King County internal government departments / agencies, local government city jurisdictions, fire and utility districts, special purpose districts, some school districts, King County Office of Emergency Management (OEM), State of Washington Emergency Management Division (State EMD), and the U. S. Department of Homeland Security's Federal Emergency Management Agency (FEMA). This RHMP meets the requirement for a Hazard Mitigation Plan under the amended Stafford Act (44 CFR, Part 201). Many local jurisdictions, communities,

governmental agencies, and the public were involved in the RHMP development and critical review process.

It is vital for the region to have a proactive, coordinated approach to mitigation. Mitigation measures save lives, reduce injuries and prevent or decrease financial losses from the many hazards our region faces. The 2009 RHMP examines efforts that can be applied to reduce the loss of life and property, human suffering, economic disruption, and disaster assistance costs through prevention and mitigation efforts.

Some projects are being implemented with existing funding sources. As additional funding sources become available, the regional plan will guide the selection of eligible projects from the criteria set forth in the Hazard Mitigation Grant Program (HMGP) and from other mitigation funding sources.

The development of this document represents a coordinated effort of many elements in the region. We are indebted to the staff of Washington State Emergency Management, FEMA, technical writers, researchers and contributing members of the participating workgroups. Each local mitigation strategy can stand alone but the combined efforts provide greater return for the region as a whole. The underlying regional mitigation plan goal is to implement the regional strategy through mutually beneficial and cost-effective regional projects.

# Plan Context and Limitations – Highlights

Planning for the 2009 RHMP update is occurring concurrently in two phases. Phase 1 is a King County Plan – Base Plan, and includes a limited number of jurisdictional annexes who were planning partners throughout the update process. Phase 2 will incorporate the majority of all remaining jurisdictions from within the county, as well as new planning partners who were not previously part of the county's RHMP. King County is comprised of over 154 distinct jurisdictional entities which include cities, fire districts, utility districts, school districts, special purpose districts, and others. Any jurisdiction can request to be incorporated into this RHMP in a prescribed way as defined in Section 2 – Plan Development, in the Plan Maintenance and Plan Management & Guidelines for Adding a Jurisdiction to the King County Regional Hazard Mitigation Plan sections. This process was elected because of the time constraints the county was operating under as a result of the potential flood issues surrounding the Howard Hanson Dam.

The county was required to shift focus from mitigation planning to plan for dam response efforts to help ensure life safety and infrastructure protection. When it became apparent that the county could not fulfill both requirements in the timeframe necessary, the county not only hired additional personnel to work on the update to the RHMP, but also shifted some of the responsibility associated with this plan to other county departments. Additionally, with the expedited

process necessary to gain plan approval in the most expeditious manner, the county was not able to devote the staff necessary to provide the technical assistance needed for all jurisdictions to be able to complete their plan. It was determined to be in the best interest of the county to ensure the county itself maintained 44 CFR compliance by completing the Base Plan in advance to all of the jurisdictional annexes. Therefore, the Phase 1 and 2 process was developed by the county's planning team. This allowed for continued compliance on the part of the county, while also allowing for the addition of jurisdictions after the Base Plan has been adopted.

Another major change within this RHMP update involves the King County Government portion of the RHMP. The 2004 RHMP was written with a King County Government Annex section contained in Annex B. For the 2009 RHMP, the appropriate contents of the 2004 King County Government Annex B section were incorporated into the Base Plan to include those parts being redistributed into Sections 1-8, as appropriate. Because of the time constraints involved, some of our partnering agencies chose to produce their own mitigation plan, while others chose not to participate at all. For this reason, the current planning document may lack details regarding particular portions of geographic King County.

In 2009, a new section has been added to include guideline information on how a jurisdiction can add on to the King County Regional Hazard Mitigation Plan. This guideline can be located in Section 2 - Plan Development, in the Plan Maintenance and Plan Management section.

### Preface and Overview

### Why Develop a Mitigation Plan?

The rising cost from the impacts of natural disasters has led to renewed interest in identifying effective ways to reduce our vulnerability to disasters. Natural hazard mitigation plans help communities to reduce their risk from natural and manmade hazards by identifying vulnerabilities and developing strategies to lessen and sometimes even eliminate hazards.

Many communities resist adopting mitigation measures as they can be seen to be restrictive, costly, without immediate tangible benefits, or are incompatible with community development. However, effective mitigation measures are designed with the future in mind. Consequently, our region is committed to convincing its constituents to view mitigation as an opportunity to provide sustainable development that improves the economic value and quality of life for the region, its communities, businesses and residents.

Here are some benefits of mitigation planning for agencies within King County:

- Leads to a judicious selection of risk reduction actions by setting clear goals and identifying and implementing policies and cost-effective programs and actions that reduce the effects of losses from future disasters.
- Builds partnerships to enhance collaboration and gain support among the parties whose interests may be affected by hazard losses.
- Encourages a broad range of stakeholders to forge partnerships that pool skills, expertise, and experience to achieve a common vision to ensure that the most appropriate and equitable mitigation projects are undertaken.
- Contributes to sustainable communities, ensuring future generations will
  continue to enjoy the same or improved quality of life that we do.
- Links sustainability and loss reduction efforts to other goals, like promoting open space planning that also prevents development in hazard locations such as floodplains or landslide areas.
- Establishes funding priorities so agencies can better articulate their needs
  to state and federal officials when funding becomes available, particularly
  following a disaster for prioritized projects. Such communities can
  present projects as an integral part of an overall, agreed-upon strategy,
  rather than as projects that exist in isolation.

Most importantly, hazard mitigation "saves lives and property" from natural, technological, or manmade, hazards through mitigation actions. If we can identify potential hazards in our community, assess potential risk and impacts, and access vulnerability assets and populations, then we have the opportunity to develop strategies to help mitigate the impacts before, during and after a hazard event.

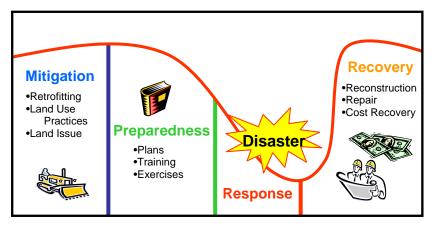
In addition, future federal and state funding of mitigation projects depend on the successful completion of a hazard mitigation plan. Only those states and jurisdictions with approved plans that meet the Disaster Mitigation Act of 2000 and amended requirements criteria will be eligible to receive Hazard Mitigation Grant Program (HMGP) funds in the future. Through a "regional" hazard mitigation planning approach, participating agencies within King County will optimize the benefits of working together and ensuring the best opportunity for gaining future competitive grant funding for hazard mitigation projects.

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### **Mitigation Planning Process**

Mitigation planning is the first of the four "phases of emergency management" followed by preparedness, response and recovery. This "prevention-related" aspect of emergency management often gets the least attention, yet is one of the most important steps in creating a disaster-resistant community.



Four Phases of Emergency Management

Mitigation is defined as any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event. Mitigation encourages long-term reduction or elimination of hazard vulnerability. The goal of mitigation is

to save lives and reduce property damage. Mitigation can accomplish this, and should be cost-effective and environmentally sound. This, in turn, can reduce the enormous cost of disasters to property owners and all levels of government. In addition, mitigation can protect critical jurisdiction facilities, reduce exposure to liability, and minimize community disruption. Examples include land use planning, adoption of building codes, elevation of homes, acquisition and relocation of homes away from floodplains, and public education.

There are also six steps in mitigation planning (new steps for 2009 update):

- 1. Organizing resources
- 2. Identifying hazards and vulnerability
- 3. Assessing risks
- 4. Developing mitigation strategies
- 5. Developing the Plan
- 6. Implementing, monitoring and updating the Plan

From the start, jurisdictions need to focus on the resources needed to develop a successful mitigation planning process. An essential step includes identifying and organizing interested members of the community as well as those with technical expertise. A wide cross-section of planning participants is a necessary ingredient in identifying and addressing regional hazard mitigation concerns, as well as building overall consensus.

Next, communities must identify the characteristics and potential consequences of hazards that can occur locally and regionally. It is important to understand how much of the community can be affected by specific hazard events and what the impacts could be on important community assets. Some assets may be more at risk than others simply because of where they are located and the function they serve. Examples can include emergency operations centers, hospitals, telecommunications, etc. Certain populations may be more at risk because of where they live – densely-populated urban areas in a liquefaction zone are more likely at risk during an earthquake than smaller populations living in more stable areas of rural parts of the county. Other sectors of the population may get limited emergency information because of communication obstacles.

By understanding the risks posed by hazards, jurisdictions and communities can then determine their priorities and look for possible ways to avoid or mitigate the impacts. The result is a well thought-out plan and strategy, along with effective activities to mitigate such potential hazards.

To ensure the success of an ongoing program, it is critical that the RHMP remains relevant. In order to do this the regional hazard mitigation planning group must continually update the RHMP, monitor its progress, and conduct periodic evaluations. In King County's case, this can include incorporation of new regional partners, incorporating improved collection and evaluation of hazard data, and making sure mitigation activities are being accomplished.

## **How the Plan is Organized**

The 2009 King County Regional Hazard Mitigation Plan is organized into eight basic sections:

- **Sections 1 and 2** provide an administrative overview of the planning process.
- **Section 3** provides a comprehensive profile of the region including maps; this information is key in understanding the various aspects of the community that are involved or can be impacted during hazard events.
- **Section 4** profiles individual participating agencies.
- Section 5 includes hazard identification, vulnerability and impact
  assessment information based on the eight of nine most common natural
  hazard types that occur within our region with summaries of other major
  hazard incidents our region experiences; additional identified hazard
  topics will be addressed in priority order in subsequent years.
- **Section 6** summarizes critical facilities in the region by category, and summarizes the hazard incident of flooding with a detailed risk assessment and repetitive losses in the six river basins in King County (new for 2009).
- **Section 7** outlines the county's regional hazard mitigation strategy.

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• **Section 8** includes annexes and other information in support of the first seven sections of the main document. The sections are arranged in a sequence that reflects the mitigation planning process itself.

## Mission and Vision

The 2004 RHMP Taskforce developed the mission and vision statements with input from the Partner's group. It was the intent of both groups to keep these statements simple and broad in scope, and to carry these forward in 2009. The RHMP Taskforce reaffirmed the Mission, Vision, Goals and Objectives for the 2009 RHMP update.

#### Mission

"Reduce the impact of natural, technological and human-caused disasters upon the communities within King County."

#### Vision

"King County is a region where disasters have minimal impact on people, infrastructure and the environment."

# Goals and Objectives

The goals and objectives are based on the mission and vision statements and are listed in order of planning priority. Mitigation strategies and activities are based on these goals:

- 1) Protect Life and Property
- 2) Support Emergency Services
- 3) Increase Public Awareness
- 4) Preserve Natural Systems and Resources
- 5) Encourage Partnerships
- 6) Enhance Planning Activities

### 1. Protect Life and Property

A. Implement activities that assist in protecting lives and property by making homes, businesses, infrastructures, critical facilities, and other community assets more resistant to losses from natural hazards.

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- B. Maintain essential services, facilities and infrastructures during disasters.
- C. Identify populations with special needs or those who may be more vulnerable to the impacts of disasters or hazard events.
- D. Reduce losses and repetitive damages from chronic hazard events.
- E. Provide and/or improve emergency warning systems.

### 2. Support Emergency Services

- A. Strengthen and support countywide disaster and emergency response efforts.
- B. Protect and maintain critical facilities, infrastructures and services essential to emergency service and disaster response activities.

#### 3. Increase Public Awareness

- A. Enhance the public's knowledge about hazards that occur in the region and how they can be impacted.
- B. Support education and outreach programs to increase the public's awareness about disaster preparedness, mitigation, emergency response, and recovery activities.
- C. Develop education strategies, programs and materials to reach populations with special needs.
- D. Provide and support comprehensive education activities that address all sectors of the community.

### 4. Preserve Natural Systems and Resources

- A. Ensure protection of agriculture, fish, wildlife, and natural resources.
- B. Balance watershed planning, natural resource management, and land use planning with natural hazard mitigation to protect life, property, the environment and economy.

#### 5. Encourage Partnerships

A. Strengthen communication and participation among public agencies, citizens, non-profit organizations, businesses and industry.

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B. Coordinate hazard mitigation planning efforts with other local and regional organizations involved in disaster preparedness, response, and recovery activities.

## 6. Enhance Planning Activities

- A. Improve data collection and evaluation processes for identifying critical facilities, infrastructures, essential services, and populations at risk.
- B. Improve hazard assessment information and resources.
- C. Enhance and increase participation and representation on the Regional Hazard Mitigation Plan Taskforce and Partners Committee.
- D. Facilitate ongoing review and implementation of the RHMP.
- E. Actively monitor and evaluate the status, implementation and completion of mitigation action items.
- F. Routinely review, update and enhance all aspects of the RHMP.

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# 2009 King County Regional Hazard Mitigation Plan Matrix of Changes

# Section 1, Matrix 1.1

Note: This *Matrix of Changes* documents most of the pertinent changes made from the 2004 RHMP Plan to the 2009 RHMP Plan update. This 2009 Matrix represents high level changes made during Phase 1 of the RHMP planning process. Phase 2 planning information is indicated in the RHMP.

Section 1 – Introduction		
	2009	
Executive Summary	News additions for 2009 Plan update are shown as: (new in 2009); General, grammar, and statistical data updates as available and/or are noted or assumed made; Flooding hazard significantly updated, Section 5; New sections added: Dam / Dam Safety, as example, in Section 5, and throughout RHMP; The 2009 Plan retains the same integrity in 8 sections, as the 2004 RHMP, Section 1 – 7, Basic Plan, and Section 8 –	
	Annexes;	
	Matrix of Changes – New tracking document for 2009	
Planning Context and Limitations	Defined Phase 1 and Phase 2, for 2009 Plan update The 2004 Annex B for King County Government was eliminated and the information incorporated back in 2009 RHMP Sections 1-7, as appropriate. New guideline information on how a jurisdiction can request being added to the King County RHMP, located in Section 2, for Phase 2.	
Plan Organization	Updated for 2009; Sections delineated No KC Govt.; Annex B - incorporated	
	Matrix of Changes document will be located the end of Section 1.	

Section 2 – Plan Development		
Planning Process - significantly updated for 2009; Phase 2 explained in detail		
Common RHMP planning elements		
For 2009, moved Cost-Benefit info to Section 7; from 2004 Plan, Section 2 and 5.		
Public Involvement - significantly updated for 2009		
Phase 1, King County Public Involvement Participation Table 2009, Annex E		
Plan Maintenance and Plan Management - new for 2009		
New tables to show 2004 and 2009 participants, in Phases		
New - How Jurisdictions can join to the 2009 KC RHMP		

	New Letter of Intent, document 1.1 – in Annex B
	2009 Adoption of Plan - updated
	2009 RHMP Plan elements to be incorporated into other KC documents – updated
ı	2004 Historical Planning Process Section, removed to Annex C in 2009

# Participating Agencies Tables new for 2009

	2004	2009		
King County Government	KC Govt - Annex B; Independent filing of 7 King Departments	Phase 1 - King County Govt.  No Annex B for KC Govt.: info incorporated back into Basic Plan, Sections 1-7 and Annexes;  Status update of KC Internal Government agencies  Phase 2 – Jurisdictions (expected for 2009 update)		
Cities	14 cities  Auburn Bellevue Bothell Burien Duvall Federal Way Issaquah Kirkland Medina Normandy Park North Bend Redmond SeaTac Woodinville	11 cities Loss of 7 cities  Duvall, Kirkland Normandy Park North Bend Redmond SeaTac Woodinville Gaining 4 cities Des Moines Newcastle North Bend Pacific Tukwila Net loss of 2 cities		
Fire Districts	8 fire districts	3 fire districts Loss of 6 districts		
Utility Districts	<ul> <li>15 utility districts</li> <li>Cedar River Water and Sewer</li> <li>Coal Creek Utility</li> <li>Covington Water</li> <li>KC Water District #19</li> <li>KC Water District #20</li> </ul>	9 utility districts Loss of 8 districts  Cedar River Water and Sewer  Coal Creek Utility  Newcastle  KC Water District #20		

King County Regional Hazard Mitigation Plan: RHMP Changes for 2009 11/12/09

Matrix 1.1-2

	1	1
	<ul><li>KC Water District #90</li><li>KC Water District #111</li><li>Midway Sewer</li></ul>	<ul> <li>Northshore Utility</li> <li>Ronald Waste Water</li> <li>Shoreline Water</li> </ul>
	Northshore Utility	Val Vue Sewer
	Ronald Waste Water	Woodinville Water
	Shoreline Water	Gaining 2 districts
	<ul> <li>Soos Creek Water</li> </ul>	Covington Water
	<ul> <li>Southwest Suburban</li> </ul>	<ul> <li>Sammamish Water and</li> </ul>
	Sewer	Sewer
	<ul> <li>Val Vue Sewer</li> </ul>	Gaining 2 districts
	<ul> <li>Woodinville Water</li> </ul>	<ul> <li>Highline Water</li> </ul>
		<ul> <li>Sammamish Water and</li> </ul>
		Sewer
		Net loss of 4 districts
School Districts	2 school districts	1 school district
	<ul> <li>Lake Washington</li> </ul>	Loss of 2 districts
	<ul> <li>Vashon Island</li> </ul>	<ul> <li>Lake Washington</li> </ul>
		<ul> <li>Vashon Island</li> </ul>
		Gaining 1 district
		Federal Way
		Net loss of 2 districts

Section 3 – Regional Profile <sup>1,2</sup>		
	2009	
Phase 1	General updates if available	
Population and	Updated 2009 estimates	
Demographics	<ul> <li>Population Distribution (update Table 3-1)</li> </ul>	
	<ul> <li>Population by Age and Sex (update Table 3-2)</li> </ul>	
	<ul> <li>Household, Cultural Diversity (update Tables 3-3, 3-4)</li> </ul>	
	Population Growth and Trends.	
	No updates available	
	People with Disabilities and Disability Type	
Housing	Updates for 2009	
	Growth	
	Household Size	
	(update Table 3-7)	
	No updates available	
	Age of Construction	
	Group Housing	
Geopolitical	Updates for 2009	
Jurisdiction	King County Cities and Towns	
	(2009 U.S. estimates for population, land area, and land	
	value. Update to Table 3-10)	
	Native American Tribes	
	<ul> <li>School District Enrollment and School District Population (update to table 3-11)</li> </ul>	
	• Fire Districts Services Population and Area (update Table 3-	
	12)	

	I
	Flood Control Zone Districts
	(re-written for 2009 by DNRP)
	<ul> <li>Drainage Districts (and additional 6 district contacts and map 3.7.5)</li> </ul>
Economy	Updates for 2009
	• Employment and Employment by Industry (update to Table 3-13)
	<ul> <li>Removed Bon-Macy's, Washington Mutual Bank, and Airborne; added World Vision and Weyerhaeuser</li> </ul>
	International Trade
	Income and Wages
	Unemployment and Poverty (update to Table 3-14)
Transportation	Updates for 2009
rranoportation	* Air Service for Sea-Tac (updated for Plan 2009)
	* Sound Transit Commuter Rail (updated for 2009)
	* Commuting Trends / Patterns, Public Transit
	(updated for 2009, update of Figure 3.1)
	* Washington State Ferries
Emergency	Updates for 2009
Services	• Fire Service (update to Table 3-15)
00111000	Emergency Medical Service
	Law Enforcement (updated Table 3-16)
	King County Sheriff's Office
	(Tables 3-17, 3-18 statistics and response calls updated for
	2009)
	• Emergency Communications (9-1-1) and Puget Sound RCPPP Map
	Emergency Management and Search and Rescue
	Public Health
	No updates available
	Hospitals – Emergency Care
Education	Updates for 2009
	Public Primary
	Secondary Education
	and Post Secondary Education
	No updates available
	Types of Educational Buildings
Resources	Updates for 2009
1.0000.000	Water (new color watershed map for 2009)
	Seattle Public Utilities and Waste Water Treatment
	New for 2009: King County Solid Waste Management Plan
	• Electricity
	Fuel Transmission Systems
Land Use,	Updated for 2009 by DDES
Development	Designated Urban Growth Areas
and Growth,	Land Use Trends and Growth Targets
and <b>Annex F</b>	- Lana Osc Honas and Growth rangets
Maps	2003 maps were removed to New 2009 Annex K – 2004 Plan Maps

King County Regional Hazard Mitigation Plan: RHMP Changes for 2009 11/12/09

Section 4 – (2009 Title) - Participating King County Government and		
Jurisdiction Profiles (2003 Title) - Participating Agency Profiles		
	2004	2009
		Phase 1 & 2 Explained, as in Section 1, and 2 Expanded Phase 2 language
For Phase 1 - King County Government Departments / agencies	1 conglomerated King County Annex B 7 King County departments	KC Annex B – removed; info incorporated into Basic Plan Sections 1-7, as appropriate New summary tables for 2009,
	/agencies	updates of the 7 KC internal departments; Addition of status for King County internal departments involved in 2009.
		Phase 1 & 2 Explained, as in Section 1, and 2 Expanded Phase 2 language
For Phase 2 - City and, Fire Districts, Utility Districts, and School Districts	<ul> <li>14 cities and</li> <li>departments</li> <li>8 fire districts</li> <li>15 utility district</li> <li>2 school districts</li> </ul>	Summary tables new for 2004 and 2009, updates of the previous or additional agencies  11 cities  3 fire districts  9 utility districts  1 school district  Addition of profiles for agencies involved in 2009. Omission of agencies no longer involved in 2009. (for Phase 2)

Section 5 – Hazard Identification and Vulnerability Analysis Title Change in 2009 (from Assessment (2003) to Analysis (2009)		
	2004	2009
Profile of Hazards	2004, Section 2 – cost benefit info moved to Section 7 (2009)	To make the hazard analysis more helpful, adjective descriptors (high, moderate, and low) are established for each hazard's probability of occurrence and the county's vulnerability, or impact, in the event of a hazard.
		Moved Cost-Benefit info to Section 7, from 2004, Section 2 and 5. Flooding Hazard increase to High Risk

King County Regional Hazard Mitigation Plan: RHMP Changes for 2009 11/12/09

Understanding Diek Datings		Now for 2000: now tables for 2004
Understanding Risk Ratings, Terminology Defined		New for 2009; new tables for 2004
reminology Delined		and 2009, Updated from (2004)
		Probability vs. Impact to Probability
Ourse and a Constitution		and Impact
Summary of Results		New Table for 2004 and 2009, to
		include new Total Risk column
Five Year Plan cycle and		Expanded in 2009
Source of Data		
HAZARDS		All hazards updated with history of
		events, links footnotes/end-notes;
		as possible
Severe Weather	High frequency /	If severe weather contributes to a
Covere vicame.	moderate impact	flooding incident(s), these
	moderate impact	additional hazard rankings may be
		suddenly upgraded because
		flooding impacts increases the risk
		of possible increased frequency of
<u> </u>		secondary hazards
Tornado		Added in response to recent
		occurrence(s) as a result to severe
		weather; new in 2009 text
Wind	1993 Windstorm	Updated with 2006 Windstorm
Avalanche		Updated with Interstate closures
		since 2004
Flooding	High frequency /	Risk rating upgraded to high
g	moderate impact	frequency / high impact because
		of the increased Howard Hanson
		Dam issues and Green River Valley
		risk of potential flooding in the next
		five year period starting 2009 and
		beyond
		beyond
Major King County Divor		Added for the 2000 Plan undeta by
Major King County River		Added for the 2009 Plan update by the KC DNRP
Basins &		· · · · ·
King County Flood Control		New Tables 5.5A and 5.5B
District &		Added New Table 5-7
Flood Forecasting &		History Update
Green River Valley		
potential flooding		
(Flooding) Hazard Impacts		Updated economic impacts listed in
		accordance with Green River
		Flooding
		•
II		Past / Present Mitigation Efforts
		Past / Present Mitigation Efforts updated New NFIP added
		updated New NFIP added
Dams / Dam Safety		updated New NFIP added New KC Flood Warning Center
Dams / Dam Safety		updated New NFIP added New KC Flood Warning Center New Section in 2009
Dams / Dam Safety		updated New NFIP added New KC Flood Warning Center New Section in 2009 Added in response to the increased
Dams / Dam Safety		updated New NFIP added New KC Flood Warning Center New Section in 2009 Added in response to the increased risk of potential flooding within the
Dams / Dam Safety		updated New NFIP added New KC Flood Warning Center New Section in 2009 Added in response to the increased risk of potential flooding within the Green River Valley and Howard
Dams / Dam Safety  Landslide		updated New NFIP added New KC Flood Warning Center New Section in 2009 Added in response to the increased risk of potential flooding within the

King County Regional Hazard Mitigation Plan: RHMP Changes for 2009 11/12/09

Matrix 1.1-6

(Earthquake) Hazard Impacts	Added critical infrastructure interruption as a result of disasters associated with Earthquakes
Civil Disorder	Updated to include increased surveillance of annual Mardi Gras
Drought	Updated to include 2005 history update of water/snow pack shortages
Hazardous Materials	Updated to include current waste sites and material response teams
Transportation	Updated with current demographics for transportation modes and accidents since 2004; Update of RPIN wording
Tsunami / Seiches	Map new for 2009
<ul> <li>Pandemics(Epidemics)</li> <li>Volcanoes / Volcanic activities</li> <li>Extreme Heat</li> <li>Pipeline (Utility Energy Shortage)</li> </ul>	Future hazard topics are identified for the next RHMP

Section 6 – (2009 Title) - Vulnerability Assessment, Risk Analysis and		
Capabilities (2004 title) Vulnerability Assessment and Risk Analysis		
2004	2009	
Planning Methodology	Updated to include emphasis on Flooding, 6 major KC river basins	
Critical Facilities King County	Per KC DNRP King County Flood Hazard Management Plan Located in Annex G (FOUO)	
King County Six Major River Basins	Per KC DNRP; New in 2009, pages 6 - 3 through pages 6 - 22 Risk and Vulnerability assessment NFIP language expanded NFIP Repetitive Loss properties	
Table 6-1	Incorporated cities and unincorporated  Deleted, replaced with Table 6.1: Major King County River Basins, specifically the analysis of the 6 major King County river basins  South Fork Skykomish River Snoqualmie River Sammamish River Cedar River Green River White River	

King County Flood Control District Information for Six	Analysis for the 6 river basins provided by the King County Flood Control District for 2009
major King County River	• Flow
Basins	Flood Characteristics
	Flood Exposure
	Economic Impact
	Development Trends
	Repetitive Loss
Capability Assessment	New in 2009
	Legal and Regulatory
	Administrative and Technical
	Fiscal
Vulnerable Populations	Updated
Defined	
Table 6-1	Replaced in 2009 with Six Major River Basins
Table 6-2	Deleted as information is provided in Section 3

Section 7 – Regional Mitigation Strategy		
2004	2009	
	Section 7 - Rewritten	
	Moved Cost-Benefit info to Section 7; from 2004 Plan, Section 2 and 5.	
Critical Facilities	List(s) Located in Annex G (FOUO)	
Mitigation Strategies	From 2004 Plan, KC Annex B, King County Departments / Agencies; Evaluation of 2004 Initiatives - Status (upper right hand corner) (retained in 2009)  New tables for 2009 King County Government - Internal / Agencies; Status	
	Addition of status for King County internal departments involved in 2009. Omission of KC Department / agencies who have completed projects, removed to <b>New 2009 Annex L</b> ; 2004 King County Government Initiatives – Completed	

Section 8 – Annexes	
2004	2009
Annexes for 2004	Annexes for 2009; New Annex Index with 4 title changes
A-J	(B-E) **
	Updated content, as indicated
	A-J
	K-L (new for 2009)
Annex A	Annex A – Plan Distribution List
**Annex B – Individual	**Annex B – Individual Jurisdiction Plans (new title)
Agency Plans	New Form 1.1 Letter of Intent; to join KC RHMP
	·
	Phase 1
	KC Annex B - Moving pertinent sections back into Basic Plan,
	Sections 1-7 for 2009, (partial list)

	<ul> <li>Updated 2009</li> <li>KC Govt. department /agency tables (Section 2 and 4)</li> <li>Assistance (with mention of HHD hazard)</li> <li>20/20 Software use</li> <li>KC Govt. Department / Agency Initiatives</li> <li>Recent Phase 1 and Phase 2 expected participation</li> <li>For 2009, from 2004 Plan, KC Annex B, King County Departments / Agencies; Evaluation of 2004 Initiatives Status (See upper right hand corner)</li> </ul>
	(Phase 2 – Expected Jurisdiction Participation – Section 2 and 4 Tables)
**Annex C – Agency Participation	**Annex C – King County Government and Jurisdiction Participation (new title) New - KC Govt. Chart Historical KC 2004 Planning Process Info (retained in 2009)
**Annex D - Plan	**Annex D – King County Plan Adoption Documentation
Adoption Documentation	(new title)
**Annex E - Public	**Annex E - Public Involvement Participation (new title)
Participation	New KC Govt. Chart
Annex F	Annex F – Policy and Program Analysis
Annex G	Annex G – Critical Facilities (FOUO)  New – KC DNRP Critical Facilities List - Flooding
Annex H	Annex H - Potential Funding Sources
Annex I	Annex I - References and Resources
Annex J	Annex J - Glossary
	New Annexes for 2009
	Annex K - 2004 Plan Maps (removed from Section 3 and
	Section 5 to Annex K) (Note: Maps are identified as 2003)
	Annex L – 2004 King County Government Initiatives - Completed (removed from 2004 KC Annex B)